Permit to Operate

FACILITY: S-73 EXPIRATION DATE: 08/31/200

LEGAL OWNER OR OPERATOR: OILDALE ENERGY LLC

MAILING ADDRESS: P O BOX 5487

BAKERSFIELD, CA 93388

FACILITY LOCATION: 1134 MANOR ST & NORRIS RD

OILDALE, CA 93308

FACILITY DESCRIPTION: ELECTRIC POWER GENERATION

The Facility to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

The Permit to Opertae remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

DAVID L. CROW

Executive Director / APCO

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Diector of Permit Services

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-73-0-1 **EXPIRATION DATE:** 08/31/2004

EQUIPMENT DECRIPTION:

- 1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1; Kern County Rule 111; and PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; Kern County Rule 111; and PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0], [Federally Enforceable Through Title V]
- 4. Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020. [District Rule 2010, 3.0 and 4.0; 2020; and Kern County Rule 2011, [Federally Enforceable Through Title V]
- 5. The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.9.1 and 9.13.1], [Federally Enforceable Through Title V]
- 6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031 and PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 7. Every application for a permit required under Rule 2010 (Permits Required) shall be filed in a manner and form prescribed by the District. [District Rule 2040], [Federally Enforceable Through Title V]
- 8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.5.1], [Federally Enforceable Through Title V]
- 9. The operator shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
- 10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.6.1], [Federally Enforceable Through Title V]
- 11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520. [District Rules 2520, 9.6.2 and 1100, 7.0], [Federally Enforceable Through Title V]
- 12. If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.8 and PSD ATC SJ 83-07], [Federally Enforceable Through Title V]

- 13. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.9.2], [Federally Enforceable Through Title V]
- 14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.9.3], [Federally Enforceable Through Title V]
- 15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.9.4], [Federally Enforceable Through Title V]
- 16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.9.5], [Federally Enforceable Through Title V]
- 17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.10], [Federally Enforceable Through Title V]
- 18. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District, the ARB, or EPA to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.14.2.1 and PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 19. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District, the ARB, or EPA to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.14.2.2 and PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 20. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District, the ARB, or EPA to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.14.2.3 and PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 21. Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District, the ARB, or EPA to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.14.2.4 and PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 22. No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101, by using EPA method 9. If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and Kern County Rule 401], [Federally Enforceable Through Title V]
- 23. No person shall supply, sell, solicit or apply any architectural coating, except specialty coatings, that contains more than 250 grams of VOC per liter of coating (less water and exempt compounds, and excluding any colorant added to tint bases), or manufacture, blend, or repackage such coating with more than 250 grams of VOC per liter (less water and exempt compounds, and excluding any colorant added to tint bases) for use within the District. [District Rule 4601, 5.1], [Federally Enforceable Through Title V]
- 24. No person shall apply, sell, solicit, or offer for sale any specialty architectural coating listed in the Table of Standards (District Rule 4601, Table 1), nor manufacture, blend, or repackage such coating for use within the District, which contains VOCs (less water and exempt compounds, excluding any colorant added to tint bases) in excess of the specified limits listed in Table 1 of Rule 4601. [District Rule 4601, 5.2], [Federally Enforceable Through Title V]
- 25. All VOC-containing materials shall be stored in closed containers when not in use. In use includes, but is not limited to: being accessed, filled, emptied, maintained or repaired. [District Rule 4601, 5.4], [Federally Enforceable Through Title V]
- 26. A person shall not use VOCs for the cleanup of spray equipment unless equipment for collection of the cleaning compounds and minimizing its evaporation to the atmosphere is used. [District Rule 4601, 5.5], [Federally Enforceable Through Title V]
- 27. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.2. [District Rule 4601, 6.1 and 6.2], [Federally Enforceable Through Title V]
- 28. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.14.1 and 10.0], [Federally Enforceable Through Title V]
- 29. If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F], [Federally Enforceable Through Title V]
- 30. If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, [40 CFR Part 82, Subpart B], [Federally Enforceable Through Title V]

- 31. Disturbances of soil related to any construction, demolition, excavation, extraction, or water mining activities shall comply with the requirements for fugitive dust control in SJVUAPCD District Rule 8020 unless specifically exempted under section 4 of Rule 8020. [District Rule 8020], [Federally Enforceable Through Title V]
- 32. Outdoor handling and storage of any bulk material which emits dust shall comply with the requirements of SJVUAPCD Rule 8030, unless specifically exempted under section 4 of Rule 8030. [District Rule 8030], [Federally Enforceable Through Title V]
- 33. Any paved road over 3 miles in length, and any unpaved roads over half a mile in length, constructed after December 10, 1993 shall use the design criteria and dust control measures of, and comply with the administrative requirements of, SJVUAPCD Rule 8060 unless specifically exempted under section 4 of Rule 8060. [District Rule 8060], [Federally Enforceable Through Title V]
- 34. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M], [Federally Enforceable Through Title V]
- 35. The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.17], [Federally Enforceable Through Title V]
- 36. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2], [Federally Enforceable Through Title V]
- 37. When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permit shall apply. [District Rule 2520, 9.1.1], [Federally Enforceable Through Title V]
- 38. Equipment covered by this permit shall at all times be maintained in good working order and be operated as efficiently as possible so to minimize air pollutant emissions. [PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 39. In the event of changes in control or ownership, this Operating Permit shall be binding on new owners and operators. The applicant shall notify successor of the existence of this Operating Permit and its conditions in writing and forward a copy to the District, California Air Resources Board, and EPA. [PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 40. The applicant shall construct and operate the facility in compliance with all other applicable provisions of 40 CFR Parts 52, 60 and 61 and all other applicable Federal, State and District air quality regulations. [PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 41. At all times, including periods of startup, shutdown, and malfunction, the emissions units and associated air pollution control equipment shall be operated in a manner consistent with good air pollution control practice for minimizing emissions. [PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 42. Operation of rental units during periods of startup, shutdown, or malfunction of equipment covered by this permit shall be reported to EPA in the quarterly excess emissions report. Reports shall include the date and time of startup of all rental units, the date and time of shutdown of all rental units, and any excess emissions associated with the operation of the rental units. [PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 43. All conditions contained within this permit are applicable to the operation of any rental units. [PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 44. Variances issued by the APCO or the ARB do not relieve the permittee from compliance with any of the terms or conditions imposed by the PSD permit. [PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 45. All correspondence as required by this Operating Permit shall be forwarded to: the District; Director, Air & Toxics Div. (Attn: A-3-3), EPA Region 9, 75 Hawthorne St. San Francisco, CA 94105; and Director, Stationary Source Div., CARB, Box 2815, Sacramento, CA 95812. [PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 46. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 47. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following outdated SIP requirements: Kern County Rule 401. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-73-1-6 **EXPIRATION DATE:** 08/31/2004

EQUIPMENT DECRIPTION:

93 MMBTU/HR VERTICAL HEAT TRANSFER FLUID (HTF) HEATER INCLUDING JOHN ZINK MODEL AVR-DZX-26-SFGO THREE-STAGE STAGED COMBUSTION LOW NOX BURNER, AUTOMATIC FUEL SHUTOFFS FOR FLAMEOUT, AND STACK O2 MONITORING SYSTEM

- 1. Unit shall be fired only on PUC-regulated natural gas. [District NSR Rule; and PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 2. Gas turbine engine and duct burner (S-73-2) and HTF heater (S-73-1) may be fired concurrently. [District NSR Rule], [Federally Enforceable Through Title V]
- 3. Cogeneration facility shall not operate when any Witco units S-44-1, '2, '3, '4, '5, or '6 are operating, but may operate when boiler S-44-13 is operated at low fire. [District NSR Rule], [Federally Enforceable Through Title V]
- 4. The operation of the cogeneration facility may be suspended by Witco Corporation ("Witco") in accordance with the provisions of Section 3.1(b) of the Cogeneration Agreement dated as of 7/3/91 between Oildale Cogeneration Partners, L.P. and Witco. [District NSR Rule], [Federally Enforceable Through Title V]
- 5. Emissions shall not exceed 0.92 lb PM10/hr, 0.05 lb SOx(as SO2)/hr, 5.67 lb NOx(as NO2)/hr, 1.00 lb VOC/hr, nor 3.71 lb CO/hr. [District NSR Rule and District Rule 4301, 5.2], [Federally Enforceable Through Title V]
- 6. Nitrogen oxide (NOx) emissions shall not exceed 0.061 lb-NOx/MMBtu, calculated as lb-NO2/MMBtu of heat input (hhv). [District NSR Rule; District Rules 4351, 5.2.4.1 & 7.4; 4305, 5.1.3 & 7.4.1; and 2520, 9.4.2], [Federally Enforceable Through Title V]
- 7. Source testing for NOx and CO emission limits shall be conducted not less than once every 12 months. Gaseous fired units shall test not less than once every 36 months, if compliance is shown for two consecutive years. If a test shows noncompliance with NOx requirements, the source shall return to annual source testing until compliance is again shown for two consecutive years. [District Rules 4305, 6.3.1, and 4351, 6.3.1; and PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 8. NOx emissions (ppmv) shall be determined by EPA Method 7E (or ARB Method 100), CO emissions (ppmv) by EPA Method 10 (or ARB Method 100), stack gas oxygen by EPA Method 3 or 3A (or ARB Method 100), NOx emission rate (heat input basis) by EPA Method 19, stack gas velocities by EPA Method 2, and stack gas moisture content by EPA Method 4. [District Rules 4305, 6.2, and 4351, 6.2; and PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 9. The District must be notified 30 days prior to any compliance source testing and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081, 7.1], [Federally Enforceable Through Title V]
- 10. Compliance source testing shall be conducted at fuel use rate and load conditions which represent maximum rated output (depending on ambient conditions) of the HTF heater. These tests shall be conducted at the HTF heater outlet stack. [PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 11. At least 30 days prior to actual testing, operator shall submit to EPA Region IX a written test plan detailing methods and procedures to be used and a written quality assurance project plan that conforms to EPA guidelines for developing project plans, QAMS 0505/80. [PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 12. The main exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and equipped with flow straighteners, if necessary, to minimize turbulence. The facility shall comply with this and all applicable compliance testing procedures described in District Rule 1081 (Amended December 17, 1992). [District Rule 4703; District Rule 1081, 3.0; Kern County Rule 108.1; and PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 13. Operator shall ensure that all required source testing conforms to the compliance testing procedures described in District Rule 1081. [District Rule 1081, 6.0; and Kern County Rules 108.1], [Federally Enforceable Through Title V]
- 14. The results of each source test shall be submitted to the District, the ARB, and EPA, postmarked no later than 30 days following completion of the testing. [District Rule 2520, 9.4.2 and PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 15. Records of fuel heating value and daily consumption shall be maintained for at least five years and shall be made available for District inspection upon request. [District Rule 2520, 9.4.2, 9.5.2; and PSD ATC SJ 83-07], [Federally Enforceable Through Title V]

- 16. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rule 4201 and District Rule 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
- 17. Fuel hhv shall be certified by third party fuel supplier or determined by: ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. [District Rules 2520, 9.4.2; 4305, 6.2.1.2; and 4351, 6.2.1.2], [Federally Enforceable Through Title V]
- 18. Operator shall maintain copies of fuel invoices and supplier certifications. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 19. Total combined natural gas usage for the gas turbine engine, the duct burner, and the HTF heater shall not exceed 4.74 billion cubic feet per year. [PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 20. Operator shall maintain all records for at least five years and conform to the recordkeeping requirements described in District Rule 2520. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
- 21. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rules 401, 404, 404.1, 408, 409, 407.2, and 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-73-2-15 **EXPIRATION DATE:** 08/31/2004

EQUIPMENT DECRIPTION:

40 MW COGENERATION FACILITY, INCLUDING GENERAL ELECTRIC LM6000 SIMPLE CYCLE GAS TURBINE, NOX CONTROL AND POWER ENHANCEMENT STEAM INJECTION SYSTEM, AND WASTE HEAT RECOVERY SYSTEM

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- Cogeneration unit main exhaust stack shall be equipped with continuously recording emission monitors for NOx, CO & O2, and temperature indicators. [District Rules 1080 and 4703]
- 3. Gas turbine engine and duct burner shall be equipped with operational recording fuel flowmeters. [District Rule 2080]
- 4. Steam injection system shall be equipped with continuously recording flowmeter. [District Rules 2080]
- 5. Electrical generator shall be equipped with recording power output meter. [District Rule 2080]
- 6. Heat transfer fluid (HTF) shall not contain any volatile organic compounds as defined in District Rule 1020. [District Rule 2080]
- 7. There shall be no visible emissions from coalescer exhaust stack. [District Rule 2201]
- 8. Gas turbine engine and duct burner shall be fired only on PUC quality natural gas. [District Rule 2201]
- 9. Gas turbine engine shall not operate when any of the heaters listed in units S-44-1, -2, -3, -4, -5, or -6 are operating, except as provided below. [District Rule 2201]
- 10. Gas turbine engine may operate concurrently with heaters listed in any single permit S-44-1, -2, -3, -4, or -6 provided the cummulative concurrent operation of gas turbine engine with any heaters listed in any of permit units S-44-1, -2, -3, -4, and -6 does not exceed 360 hours per year. [District Rule 2201]
- 11. Gas turbine engine may operate when boiler S-44-13 is operating, provided boiler S-44-13 is operating only at low fire. [District Rule 2201]
- 12. The gas turbine engine and duct burner shall only operate as a cogeneration facility. [District Rule 2080]
- 13. Heat recovered in HTF system shall be used only at facility S-44. [District Rule 2080]
- 14. Startup and shutdown of GTE, as defined in 40 CFR Subpart A 60.2, shall not exceed a time period of two hours and two hours, respectively, per occurrence. [District Rule 2080]
- 15. Steam injection system for NOx control shall be utilized at all times, except during startup/shutdown, to achieve compliance with NOx mass emission and concentration limits. [District Rule 2201]
- 16. Emission rate from GTE and duct burner shall not exceed PM10: 142.0 lb/day, SOx (as SO2): 12.8 lb/day, NOx (as NO2): 1026.9 lb/day, VOC: 115.7 lb/day, and CO: 446.6 lb/day. [District Rule 2201]
- 17. Except during periods of startup/shutdown, GTE and duct burner emission rates (three-hour rolling average) shall not exceed PM10: 5.92 lb/hr, SOx as SO2: 0.54 lb/hr, NOx as NO2: 42.79 lb/hr, VOC: 4.82 lb/hr, and CO: 18.61 lb/hr. [District Rule 2201]
- 18. Permittee shall comply with the following emission limit at all times except during periods of thermal stabilization or reduced load as defined in Rule 4703: NOx (as NO2): 23.5 ppmv, and CO: 18.3 ppmv, dry @ 15% O2, (three-hour rolling average). [District Rules 2201 and 4703]
- 19. Except during startup/shutdown, NOx emission rate (one hour average) shall not exceed the NSPS standard of 130 ppmv @ 15% O2. [District Rule 4001]
- 20. Compliance with NOx and CO (lb/hr and ppmv emission limits), and demonstrated percent efficiency of gas turbine engine shall be demonstrated annually by District witnessed sample collection by independent testing laboratory. [District Rules 1081 and 4703]
- 21. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
- 22. Compliance source testing shall be conducted at fuel use rates and load conditions which represent maximum rated output (depending on ambient conditions) of the gas turbine engine. [District Rule 1081]

- 23. Permittee shall report the following emission exceedences to the District: emission rates of NOx & CO on a three-hour rolling average, NSPS emission rate on one hour average, and daily emissions of NOx and CO. [District Rule 1100]
- 24. On days of GTE startup/shutdown, permittee shall demonstrate compliance with NOx and CO daily emission limitations by records of calculations using CEM data, fuel rate data, and daily hours of operation. [District Rule 2201]
- 25. Permittee shall meet all reporting and recordkeeping requirements of NSPS Subparts A and GG. [District Rule 4001]
- 26. Permittee shall maintain records of gas turbine engine and duct burner fuel use, electrical power output, and gas turbine engine steam injection to fuel ratio on a mass basis. [District Rule 1070]
- 27. Permittee shall maintain records of hours of concurrent operation of gas turbine engine S-73-2 with any heaters listed in permit units S-44-1, -2, -3, -4 & -6. [District Rule 2201]
- 28. Such records shall be kept for a period of two years and be made readily available for District inspection upon request. [District Rule 1070]

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-73-3-1 **EXPIRATION DATE:** 08/31/2004

EQUIPMENT DECRIPTION:

93 MMBTU/HR NATURAL GAS FIRED VERTICAL HEAT TRANSFER FLUID HTF) HEATER WITH CALLIDUS MODEL LECGS-W BURNER, FLUE GAS REIRCULATION (FGR), AND OXYGEN MONITOR/CONTROLLER

- 1. HTF heater shall be fired only on PUC quality natural gas. [District NSR Rule and PSD ATC SJ83-07], [Federally Enforceable Through Title V]
- 2. Emission rates shall not exceed any of the following PM10: 0.92 lb/hr, SOx (as SO2): 0.05 lb/hr, NOx (as NO2): 30 ppmv @ 3% O2, VOC: 1.00 lb/hr, and CO: 3.71 lb/hr and 400 ppmv @ 3% O2. [District NSR Rule, 4305, and 4351], [Federally Enforceable Through Title V]
- 3. When the heater is fired more than 220 MSCFD (hot standby) the permittee shall measure and record exhaust gas NOx (as NO2), CO, and O2 concentration on a monthly basis. Measurement shall be performed using a District-approved portable analyzer. The portable analyzer shall be calibrated prior to each use with two point calibration method (zero and span) using protocol 1 gases. [District NSR Rule; District Rules 4305, & 4351; and District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 4. If the NOx or CO concentrations, as measured by the portable analyzer, exceed the allowable emission rate, the permittee shall promptly notify the District and take corrective action. If the portable analyzer readings continue to exceed the allowable emissions rate, the permittee shall conduct an emissions test within 60 days, utilizing District-approved test methods. [District NSR Rule and District Rules 4305, & 4351], [Federally Enforceable Through Title V]
- 5. Source testing for NOx and CO emissions shall be conducted within 60 days of startup and not less than once every 12 months. Gaseous fired units shall test not less than once every 36 months, if compliance is shown for two consecutive years. If a test shows noncompliance with NOx requirements, the source shall return to annual source testing until compliance is again shown for two consecutive years. [District Rules 4305, 6.3.1, and 4351, 6.3.1; and PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 6. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081, 7.2], [Federally Enforceable Through Title V]
- 7. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081, 7.1], [Federally Enforceable Through Title V]
- 8. NOx emissions (ppmv) shall be determined by EPA Method 7E (or ARB Method 100), CO emissions (ppmv) by EPA Method 10 (or ARB Method 100), stack gas oxygen by EPA Method 3 or 3A (or ARB Method 100), NOx emission rate (heat input basis) by EPA Method 19, stack gas velocities by EPA Method 2, and stack gas moisture content by EPA Method 4 or equivalent methods may be used with prior written approval from EPA. [District Rules 4305, 6.2, and 4351, 6.2; and PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 9. When the heater is fired more than 220 MSCFD (hot standby) the permittee shall keep records of the NOx and CO concentrations corrected to 3% O2, and the O2 concentration on a monthly basis. The records shall include a description of any corrected action taken to maintain the emissions within the acceptable range. [District NSR Rule, District Rules 2520, 9.5.2; and 4305 and PSD ATC 83-07], [Federally Enforceable Through Title V]
- 10. Compliance source testing shall be conducted at fuel use rate and load conditions which represent maximum rated output (depending on ambient conditions) of the HTF heater. These tests shall be conducted at the HTF heater outlet stack. [PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 11. At least 30 days prior to actual testing, operator shall submit to EPA Region IX a written test plan detailing methods and procedures to be used and a written quality assurance project plan that conforms to EPA guidelines for developing project plans, QAMS 0505/80. [PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 12. The main exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples using approved EPA test methods. The facility shall comply with this and all applicable compliance testing procedures described in District Rule 1081 (amended December 17, 1992). [District Rule 1081; Kern County Rule 108.1; and PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 13. Operator shall ensure that all required source testing conforms to the compliance testing procedures described in District Rule 1081. [District Rule 1081, 6.0; and Kern County Rule 108.1], [Federally Enforceable Through Title V]
- 14. The results of each source test shall be submitted to the District, the ARB, and EPA, postmarked no later than 30 days following completion of the testing. [District Rule 2520, 9.4.2; and PSD ATC SJ 83-07], [Federally Enforceable Through Title V]

- 15. Particulate matter emissions shall not exceed 0.1 grain/dscf at operating conditions, nor 0.1 grain/dscf calculated to 12% CO2, nor 10 lb/hr. [District Rule 4201 and District Rule 4301, 5.1 and 5.2.3], [Federally Enforceable Through Title V]
- 16. Fuel hhv shall be certified by third party fuel supplier or determined by: ASTM D 1826-88 or D 1945-81 in conjunction with ASTM D 3588-89 for gaseous fuels. [District Rules 2520, 9.4.2; 4305, 6.2.1.2; and 4351, 6.2.1.2], [Federally Enforceable Through Title V]
- 17. Records of fuel heating value and daily consumption shall be maintainted for at least five years and shall be made available for District inspection upon request. [District Rule 2520, 9.4.2, 9.5.2; and PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 18. Operator shall maintain copies of fuel invoices and supplier certifications. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 19. Total combined natural gas usage for the gas turbine engine, the duct burner, and the HTF heater shall not exceed 4.74 billion cubic feet per year. [PSD ATC SJ 83-07], [Federally Enforceable Through Title V]
- 20. Operator shall maintain all records for at least five years and conform to the recordkeeping requirements described in District Rule 2520. [District Rule 2520, 9.5.2], [Federally Enforceable Through Title V]
- 21. Sulfur content of the natural gas being fired shall be tested weekly using ASTM method D 1072-80, D 3031-81, D 4084-82 or D 3246-81 except that if compliance with the hourly SOx limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2520, 9.4.2], [Federally Enforceable Through Title V]
- 22. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kern County Rules 401, 404, 404.1, 408, 409, 407.2, and 407. A permit shield is granted from these requirements. [District Rule 2520, 13.2], [Federally Enforceable Through Title V]